

Scope & Select Phase

Purpose of Scoping:

Why do we scope projects? We scope to validate the project purpose and potential investment strategies while identifying risks and opportunities in the delivery of the project. The outputs of scoping are used to define the project context, scope, schedule (for funding and programming purposes), budget, opportunities and risks. These outputs are also used to select and plan the delivery of a portfolio of projects. The scoping and selection process often provides early perspectives and identifies expectations for stakeholder input and public involvement.

Triggers for Scoping

Various actions can trigger scoping:

- Project needs and potential wants list
- Legislative and/or public push; stakeholder needs
- Regular funding cycles (STIP, etc.)
- Defining funding buckets
- Need to re-scope a project or need to validate an assumed scope (maintenance, local, etc.)
- Shelf projects
- Emergency projects
- New or unused funding becomes available; left over funds after projects go to bid
- Development Review; major development
- EA/EIS (during planning phase or when funding available)

Inputs to Scoping:

The primary input to the scoping process is the initial [Business Case](#) (from “Define Local/State Needs”) which defines the purpose of the proposed project and establishes the project’s need and value, ‘the why.’ The initial needs Business Case is developed by the Funding Program Manager who is responsible for managing the funding program portfolio and ensuring funding program goals are met. After the pre scoping regional project portfolio meeting, the Project Sponsor is responsible for completing the initial Business Case. Asset data is also an important input to the scoping process. See [Project Workflow Diagram](#) for the overall process to initiate a project.

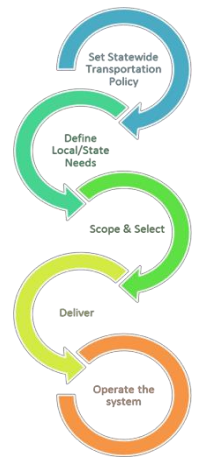
Outputs of Scoping:

Below is a list of key outputs from the scoping process, as required per FHWA & ODOT, in order to open a project EA and initiate project delivery:

- Final [Business Case](#)
- Programming request needed to obligate funds (to include projected end date)
- STIP Approval
- Project Key Number
- Executed Funding IGA (when applicable) and required match deposit

Additional outputs of scoping include:

- Scoping documentation
- Draft [Project Charter](#) (including draft schedule; after project selection)



The primary purpose of scoping is to develop sufficient and accessible documentation to communicate the scope, schedule, budget, risks and opportunities, along with constraints and assumptions, for project selection purposes. Scoping documentation is critical for use by project teams when it is time to initiate the project, as there is typically a time lag between project selection and project initiation – project sponsors and teams rely on the scoping outputs in order to avoid the need to “re-scope” when it is time to initiate the project delivery process.

Key Questions to be answered by Scoping:

- **Scope:** What is the **scope** of the project?
- **Schedule:** What is the **schedule**/urgency/timeframe of the project? (obligation of funds)
- **Budget:**
 - What is the **cost** of the project? (by phase - PE, RW, Construction)
 - What funding source will be used? (not specific federal type/color...but source of funds - ODOT vs Local/Other)
 - Did we account for the correct PE cost for the type of projects scoped?
- **Opportunities: To be identified at Pre Scoping meeting and verified at Post Scoping meeting**
 - What investment and leveraging opportunities exist? (intermodal, multi-modal, system/corridor improvements, mobility, etc.)
 - Are there opportunities to address related or nearby issues? (i.e. guardrail replacement on a 1R project)
 - Are there opportunities to combine projects?
 - Do we have the right people at the table to fully discuss all possible investment opportunities?
- **Asset Conditions and Features**
 - What is the current condition of the assets and features?
 - What issues could be addressed by the project?
 - Which issues should not be addressed by the project and why?
- **Risk:**
 - What are the **risks, assumptions & constraints** associated with the project?
 - Has the project received the necessary buy-off (sponsor, stakeholder, approval authority) etc.?
 - Risk Assessment - What issues and/or stakeholders could impact scope, schedule, and/or budget? (environmental, railroads, etc.)
 - Does the project require any specific approvals (deviates from a facility plan, design exception, stakeholder input, etc.)?
 - What standards will be applied and are there any design exceptions required?
 - Are there requirements that don't directly address the problem? If so, what are they? (Can/should those requirements be modified or exceptions made?)
 - What are the potential staging and mobility issues? Are there opportunities to separate traffic/create a logical detour?
 - What potential work-zone enforcement issues might exist?
 - What are the potential utility and right-of-way impacts?
 - What access management strategies may be needed?
- **Environmental Related Risk:**
 - What is the rough Area of Potential Impact (API) or project limits determined during the scoping phase, if not beforehand through the planning or NEPA process?
 - What natural (wetlands, waters, ESA listed species, etc.) and cultural resources are present within or near the API of the project?
 - How do we avoid or minimize impacts to the natural and cultural resources identified within the API?

- Which, if any, of the following may be required for the project?
 - Fill/removal permits (wetland delineations, OHWL identification, etc.)
 - Air Quality and/or Noise analysis and reports
 - ESA surveys and documentation
 - Hazmat assessments
 - 401 water quality certification (storm water facilities)
 - Outreach (tribal coordination, environmental justice, visual resources, etc.)
 - Historic/archaeology surveys and documentation
 - Environmental commitments (from planning/NEPA)
 - Section 4(f) and/or Section 6(f) documents
 - Preliminary mitigation
- **Investment Strategy:**
 - What is the proposed investment strategy?
 - Does the proposed improvement address the purpose of the project?
 - Do we understand the problem or opportunity? Has our understanding of the problem or opportunity changed? (If so, how?)
 - How will the project address the needs?
 - Is the project consistent with Sponsor and/or Stakeholder expectations?
 - What impacts and alternatives have been analyzed?
 - Why was the proposed strategy selected over other alternatives analyzed?
- **Practical Design S.C.O.P.E. Values and Key Performance Measures**
 - How does the project integrate and address the key practical design [S.C.O.P.E. values](#)? (Safety, Corridor Context, Optimizing the System, Public Support, and Efficient Costs)
 - How does the project address the Key Performance Measures (KPMs) identified in the [Practical Design Strategy](#)? (if any; Traffic Fatalities, Travel Delay, Pavement Condition, Bridge Condition)
- **Resources/Tasks: What resources/tasks are needed to accomplish the project?**
 - What delivery method is proposed (in house, outsource, local)?
 - What opportunities for alternative delivery/contracting exist? (i.e. CMGC, Design-Build, etc.)
 - Are consultant services needed?
 - Which disciplines are needed?
 - What outreach, communication, stakeholder engagement and public involvement may be needed? (internal and external)
- **Documentation:** Is the information **documented** in a consistent and accessible way so it can be utilized by future users? (i.e. practical design, project team initiation, etc.).
 - How has scoping validated / invalidated the initial business case?
 - Where are the answers to these questions being documented? (Business Case, Scoping Notes, FACS-STIP Tool, other)
 - How will the information be accessed when time to initiate the project?
 - How will the quality of the information be assessed?

NOTE: All scoping documentation should be saved in ProjectWise.

Scoping Activities & Charges

This chart summarizes the various phases of scoping, the associated activities, the appropriate EA to charge, and the deliverables from each phase.

Transportation STIP Scoping Phases

PLANNING PHASE	PRE-SCOPING PHASE	ACTIVE SCOPING PHASE	SCOPING TRANSITION PHASE	PROJECT INITIATION PHASE
<i>Activities leading to approved transportation plans (plan development)</i>	<i>Activities leading to 150% needs list (program level)</i>	<i>Activities leading to project selection (100% list)</i>	<i>Activities leading to opening project EA (after selection)</i>	<i>Activities leading to project kick-off (after opening project EA)</i>
Planning EA	Scoping EA		Scoping EA	Project EA
<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">STIP program assessments (bridge, program needs, etc.)</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">TSPs</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">EIS Tier 1 NEPA</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Facility Plans</div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Needs list assessment</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">STIP development & outreach</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Project needs list development</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Pre-proposal submittal work</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Operational funding bucket determination</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Proposal notifications</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Initial Business Case Development</div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Modal Coordination</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Draft budget/cost estimate (before approved STIP)</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Field & desktop scoping activities</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Determine delivery method & resourcing</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">IR safety assessment</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Scoping questions answered</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Final Business Case</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Scoping documentation</div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Region portfolio work plan (needs list, fix-it & enhance)</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Funding IGA Executed</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Cross program coordination</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Prospectus Part I or II (used for consultant selection)</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Draft project charter, schedule & generic resources</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Prospectus Part III (used for CE closeout)</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Local agency pre-project coordination</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Prospectus Part V (used to transfer from Planning to Project Delivery)</div>	<div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Scope validation & refinement</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Final project charter & schedule</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Draft & final PMP to include specific resource assignment</div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 5px;">Consultant selection</div>
Phase Deliverables: <input type="checkbox"/> Approved Plans	Phase Deliverables: <input type="checkbox"/> Approved 150% needs list <input type="checkbox"/> Initial Business Case	Phase Deliverables: <input type="checkbox"/> Final Business Case* <input type="checkbox"/> Scoping Documentation <input type="checkbox"/> Approved 100% list	Phase Deliverables: <input type="checkbox"/> Draft Project Charter and schedule <input type="checkbox"/> STIP/Key Number* <input type="checkbox"/> Executed Funding IGA* <input type="checkbox"/> Prospectus* ** <input type="checkbox"/> Programming request (to obligate funds)*	Phase Deliverables: <input type="checkbox"/> Final Project Charter <input type="checkbox"/> Project Management Plan (PMP)

To better capture the costs associated with scoping projects and project costs in the future, use this table to charge scoping activities.

Each Region is responsible for establishing and managing their scoping budgets and setting appropriate sub jobs to track expenditures. The following table shows the Expenditure Accounts (EAs) and sub-jobs that were established for each Region for the 2017-2019 Biennium.

2017-2019 Biennium Region Scoping EAs July 1, 2017 - June 30, 2019					
DESCRIPTION	SUB-JOBS				
Region	1	2	3	4	5
EA	19PF117	19PF217	19PF317	19PF417	19PF517
Project Scoping	121	121	121	121	121
Pre Scoping	151	xxx	xxx	xxx	xxx
Active Scoping	161	xxx	xxx	xxx	xxx
Transition Scoping	171	xxx	xxx	xxx	xxx

Scope Validation (Project Initiation)

In most cases, a significant time lag occurs between project selection and project initiation (typically two-three years). When a project is ready to be initiated, and a project charter is being finalized, it is important to **validate** the original scope using the documentation produced in the scoping phase. Determine if any significant changes have occurred to the project parameters and context that impact the scope, schedule, budget, risks, opportunities, assumptions, constraints or practical design implications.

Scoping Tools and References

A large variety of tools and references are available to assist in the scoping process. The [FACS-STIP Tool](#) and [TRANS-GIS](#) are the most common tools for obtaining important scoping data and asset management integration information. An asset management “one-stop-shop” has been developed to provide a comprehensive source for scoping and asset management data: <http://transnet.odot.state.or.us/hwy/SBS/Pages/AM-Resources.aspx>.

Additional Reference Information:

- [Practical Design Website](#)
- [Project Initiation Roles](#)
- [Project Delivery](#)
- [Guidebook](#)